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Compl t if Kn wn				
Application Number 10/090, 293				
Filing Date	03/04/2002			
First Named Inventor	E. Marlowe Goble et al.			
Group Art Unit	3738			
Examiner Name	Unknown			
Attorney Docket Number	MED-3			

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Examiner nitials	Cite No.1	U.S. Patent Document Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
1/1/1-		6,014,588	Fitz	01-11-2000	
7		6,019,792	Cauthen	02-01-2000	
\top		6,039,763	Shelokov	03-21-2000	
		6,063,121	Xavier et al.	05-16-2000	
		6,066,325	Wallace et al.	05-23-2000	
$\neg \neg$		6,080,157	Cathro et al.	06-27-2000	-
		6,113,637	Gill et al.	09-05-2000	77
		6,132,464	Martin	10-17-2000	H
		6,132,465	Ray et al.	10-17-2000	Va.
		Re. 36,758	Fitz	06-27-2000	70
-1		5,401,269	Buttner-Janz et al.	03-28-1995	? ;
1		5,192,326	Bao et al.	03-09-1993	CE .
7		4,863,477	Monson	09-05-1989	# 9 %
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	FOREIGN PATENT DOCUMENTS								
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			U.S. PATENT DOCU	JMENTS	
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Z)P[4		3,867,728	Stubstad et al.	02-25-1975	
		3,875,595	Froning	04-08-1975	
		4,349,921	Kuntz	09-21-1982	
		4,759,769	Hedman et al.	07-26-1988	
		4,772,287	Ray et al.	09-20-1988	>
		4,904,260	Ray et al.	02-27-1990	S.S.
		4,911,718	Lee et al.	03-27-1990	76
		5,047,055	Bao et al.	09-10-1991	
		5,071,437	Steffee	12-10-1991	2 4 3
		5,147,404	Downey	09-15-1992	\$ \ M
		5,171,280	Baugartner	12-15-1992	3 6 5
		5,258,031	Salib et al.	11-02-1993	\$ \$ \$
		5,306,308	Gross et al.	04-26-1994	
		5,306,309	Wagner et al.	04-26-1994	8 27
		5,370,697	Baumgartner	12-06-1994	•
		5,437,672	Alleyne	08-01-1995	
		4,458,642	Beer et al.	10-17-1995	
		5,458,643	Oka et al.	10-17-1995	
		5,514,180	Heggeness et al.	05-07-1996	_
		5,527,312	Ray	06-18-1996	

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Office ³	Foreign Patent Docur Number ⁴	nent Kind Code (if known)		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
PIN.		JР	10-179622	A2		07-07-1998		
		WO	00/38582	A1	NUVASIVE, INC.	07-06-2000		
		WO	98/48717	A1	TAYLOR, Jean et al.	11-05-1998		
		WO	99/23963	' A1	DISMO	05-20-1999		
		WO	01/30248	, A1	Reiley	05-03-2001		Ш
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Application Number					
Filing Date	10/090,293				
First Named Inventor	03/04/2002				
Group Art Unit	E. Marlowe Goble et al.				
Examiner Name	3738				
Attorney Docket Number	Unknown				
	MED-3				

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nitials.	No.1	Number Kind Coo	Name of Patentee or Applicant	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
114		5,534,028	Bao et al.	MM-DD-YYYY	Figures Appear
		5,534,030	Navarro et al.	07-09-1996	
\rightarrow		5,545,229	Parsons et al.	07-09-1996	
		5,556,431	Buttner-Janz	08-13-1996	
		5,571,189	Kuslich	09-17-1996	
++	\rightarrow	5,572,191	Lundberg	11-05-1996	
++		5,645,597	Krapiva	11-05-1996	
+	\rightarrow	5,653,762	Pisharodi	07-08-1997	
+	\dashv	5,674,295	Ray et al.	08-05-1997	3
+		5,674,296	Bryan et al.	10-07-1997	\$ 3
+	_	5,676,701	Yuan et al.	10-07-1997	\$ 5
\vdash	\perp	5,683,464	Wagner et al.	10-14-1997	2 7 2
\vdash		5,702,450	Bisserie	11-04-1997	3 0
1		5,716,415		12-30-1997	\$ 20 W
		5,824,093	Steffee	02-10-1998	285
		5,824,094	Ray et al.	10-20-1998	Para Para Para Para Para Para Para Para
\Box	\Box	5,865,846	Serhan et al.	10-20-1998	6-0
$\bot \bot$		5,868,745	Bryan et al.	02-02-1999	
		5,893,889	Alleyne	02-09-1999	
		6,001,130	Harrington	04-13-1999	
			Bryan et al.	12-14-1999	

]		T	Foreign Patent Do	FORE	IGN PATENT DOCUMEN	TS		
Examiner nitials*	Cite No.1	Office ³	Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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Compl te if Known				
Application Number	10/090,293			
Filing Date	03/04/2002			
First Named Inventor	E. Marlowe Goble et al.			
Group Art Unit	3738			
Examiner Name	Unknown			
Attorney Docket Number	MED-3			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*							
R		GOH JC, ET AL., "Influence of PLIF cage size on lumbar spine stability", Spine, 2000 Jan 25:1, Medline abstract - one page.					
		HEAD WC, "Wagner surface replacement arthroplasty of the hip. Analysis of fourteen failures in forty one hips", J Bone Joint					
		Surg. [AM], 1981 Mar 63:3, Medline abstract - one page.					
		KHOO LT, ET AL, "A Biomechanical Analysis of the Effects of Lumbar Fusion on the Adjacent Vertebral Motion Segment",					
Proceedings of the 2000 Annual Meeting of Spine Society, New Orleans.		Proceedings of the 2000 Annual Meeting of the North American Spine Society, New Orleans.	 				
KOTANI V, ET AL., "The effects of spina destabilization on the biomechanical and		KOTANI Y, ET AL., "The effects of spinal fixation and destabilization on the biomechanical and histologic properties					
		of spinal ligaments. An in vivo study.", Spine, 1998 Mar 15 23:6, Medline abstract - one page.					
		LEMAIRE, JP, ET AL., "Intervertebral Disc Prosthesis: Results and Prospects for the year 2000", Clinical Orthopaedics and					
		Related Research, Number 337, PP. 64-76.	Mou				
		CENTER A.	413				

Examiner Signature	Jedro	Parlane	Date Considered	10/07/07
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the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449B/PTO **Application Number** 10/090,293 INFORMATION DISCLOSURE **Filing Date** 03/04/2002 STATEMENT BY APPLICANT **First Named Inventor** Marlowe Goble et al Group Art Unit 3738 (use as many sheets as necessary) **Examiner Name** Unknown Sheet of Attorney Docket Number 5 MED-3

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Ah.		NAGATA H. ET AL., "The effects of immobilization of long segments of the spine on the adjacent and distal facet force	
		and lumbrosacral motion", Spine, 1993, Dec. 18:16, pp. 2471-2479	
		NIBU K, ET AL., "Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery [see	
		comments]", J Spinal Discord, 1997 Aug 10:4, Medline abstract - one page.	
		TSANTRIZOS A ET AL., "Segmental stability and compressive strength of posterior lumbar interbody fusion implants",	
		Spine, 2000 Aug 1 25:15, Medline abstract - one page.	
		REILEY, M.A., U.S. Patent Application Publication No. US2002/0123806A1, September 5, 2002.	
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